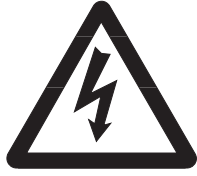


Hoefler PS 500XT

DC power supply

contents

1	Operating Instructions	1
	Constant current mode	1
	Constant voltage mode	1
	Constant current to constant voltage	1
	Constant voltage to constant current	2
2	Troubleshooting	2
3	Maintenance	3
	Cleaning	3
	Replacing Fuses	3
	Output fuse	3
	Input Fuses	4
A	Specifications	5
	Ordering Information.	6
	Technical Service and Repair	6
	Important repacking instructions	6



Safety Information

The PS 500XT power supply must be plugged into a properly grounded 3-wire power outlet for your safety.

All loads powered by the supply must be connected before turning on the power supply. Both the positive and negative leads from the load(s) must be connected. Failure to connect one lead could cause a safety hazard.

Turn the power supply off before disconnecting the leads.

1 Operating Instructions

Set the 4 sets of output jacks on the PS 500XT to supply either constant voltage or constant current power. The voltage reading is the same across all sets of jacks; the current reading is the sum of the loads connected to all sets of jacks. If the loads are of differing resistance, you may briefly connect each load singly to check what current it pulls; otherwise the current reading is divided equally among them.

Use the dial on the front panel to set the 7-hour time. For operation longer than 7 hours, set the dial to the ON HOLD position.

Constant current mode

1. Plug the power cord into the mains power module in the back of the unit and into a properly grounded 3-wire power outlet.
2. Connect the load(s).
3. Turn the current adjust knob fully counter-clockwise.
4. Turn the voltage adjust knob fully clockwise.
5. Turn on the mains power switch and set the timer.
6. Turn the current adjust knob to the desired value, as displayed on the LED ammeter. The current is now set to remain constant while the voltage changes in response to load requirements.

Constant voltage mode

1. Plug the power cord into the mains power module in the back of the unit and into a properly grounded 3-wire power outlet.
2. Connect the load(s).
3. Turn the voltage adjust knob fully counter-clockwise.
4. Turn the current adjust knob fully clockwise.
5. Turn on both the mains power switch and set the timer.
6. Turn the voltage adjust knob to the desired value, displayed on the LED voltmeter. The voltage is now set to remain constant across the load while the current changes to meet load requirements.

Constant current to constant voltage

1. Plug the power cord into the mains power module in the back of the unit and into a properly grounded 3-wire power outlet.
 2. To start a run set for constant current with a voltage ceiling, first turn on the power supply with no load attached.
 3. Turn the current adjust knob slightly and then set the maximum desired voltage with the voltage adjust knob.
 4. Turn the power off and connect the load.
-

5. Turn the power back on.
6. Set the desired current with the current adjust knob. Do not adjust the voltage adjust knob.

Constant voltage to constant current

1. Plug the power cord into the mains power module in the back of the unit and into a properly grounded 3-wire power outlet.
2. Turn on the power supply with the load attached.
3. Turn the voltage adjust knob fully clockwise and then turn the current adjust knob to the desired maximum current setting.
4. Then turn the voltage adjust knob so that the desired starting voltage is displayed.

2 Troubleshooting

Problem	Probable Cause	Remedy
No display	No power to circuits.	Check that the supply is plugged into a working power outlet. Make sure both the rear power switch and timer are on. Check input fuses. See Maintenance section.
No output but displays are lit and limits are set correctly	Power supply failure.	Call an Amersham Pharmacia Biotech Service representative.

3 Maintenance

Cleaning

Turn off and unplug the power supply before cleaning. The cabinet and display may be cleaned with a mild cleaning solution and a soft cloth.

Important Do not set liquid containers on top of the power supply. Do not pour liquids on or near the supply.

If substances are spilled on or near the power supply, unplug the unit immediately and move it away from the spill. Dry off the power supply with a soft cloth or paper towel. If liquid has been spilled inside the supply, unplug it and allow it to sit for five minutes. Then remove the cover and blot up any standing liquid. Allow the unit to air dry for several hours.

Important If it appears that a spill has leaked onto the circuit boards, call an Amersham Pharmacia Biotech service representative before attempting to operate the unit.

Replacing Fuses

The fuses in the mains power module in the back of the unit do not require maintenance, but may fail due to fatigue under normal operating conditions. Fuses protect equipment by disconnecting loads too large for the instrument's circuit design, so it is imperative that fuses are replaced only by identical fuse types.

Output fuse

115 VAC model - one 0.5 A, 250 V, Fast Blo, 5 x 20 mm

230 VAC model - one 0.5 A, 250 V, Fast Blo, 5 x 20 mm

Important Turn off the power supply and detach the power cord before replacing fuses.

1. Use a small flat blade screwdriver to push in the fuse cap and rotate it 1/4 turn counter-clockwise.
2. Insert the new fuse into the fuse cap and push it back into the fuse holder. Rotate the fuse cap 1/4 turn clockwise to lock it into position.

Input Fuses

115 VAC models - two 5 A fuses, 250 V, Slo Blo, 5 x 20 mm

230 VAC models - two 2.5 A fuses, 250 V, Slo Blo, 5 x 20 mm

Fig 3-1 illustrates how to replace the mains power module fuses.

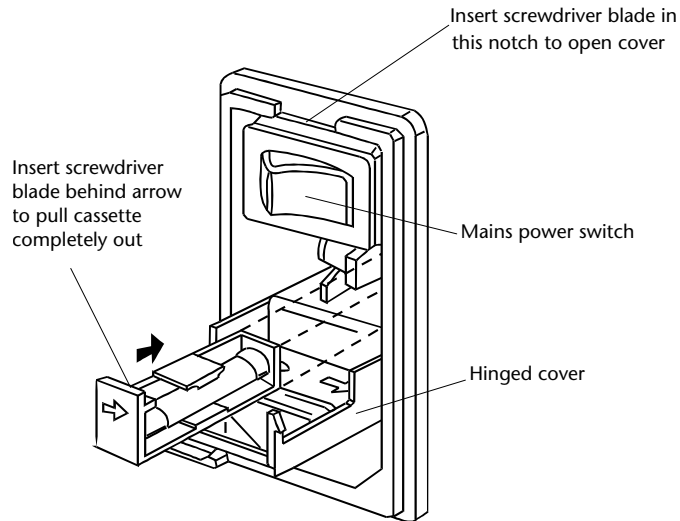


Fig 3-1 Changing mains power module fuses

Important

Turn the mains power supply switch off and detach the power cord before replacing input fuses!

1. Open the fuse compartment by inserting a small flat-blade screwdriver into the slot at the left side of the power module. Twist the screwdriver 1/8-turn to re-lease the cover, then pull out the hinged compartment, which opens to the right.
2. Insert the screwdriver above the arrow on one fuse cassette, catch the cassette end, and slowly slide it completely out of the module.
3. Pull the fuse out of its cassette and inspect.

If the fuse element is burned or broken, replace the fuse with an identical type. If the fuse appears to be intact, check it with an ohmmeter. A short circuit indicates the fuse is still usable.

4. After placing a good fuse into the cassette, slide it into the power module, making sure the arrow on the cassette points to the right, the same direction as the guide arrows on the inside of the compartment door.
5. Repeat steps 2 - 4 for second cassette.
6. Close the fuse compartment cover and gently press it into the power module until it snaps shut.
7. Plug unit in and turn mains power switch on.

Appendix A Specifications

Mains power	
115 VAC	±10%, 60 Hz
230 VAC	±10%, 50 Hz
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Fuses (All fuses are 250 V)	
115 VAC	Input: 5.0 A, Slo Blo, 5 x 20 mm (2) Output: 0.5 A, Fast Blo, 5 x 20 mm
230 VAC	Input: 2.5 A, Slo Blo, 5 x 20 mm (2) Output: 0.5 A, Fast Blo, 5 x 20 mm
<hr/>	
Power supply	0 to 500 V DC constant voltage at 0 to 400 mA DC constant current 0 to 200 W DC power
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Load regulation	V - <1.0% at 0-100% full load I - <1.0% at 100% load change
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Ripple and noise	250 mV RMS 290 µA RMS
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Line regulation	<1%, ±10% line voltage
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Operating temperature	0–40 °C
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Safety	Certified to comply with UL 1244 and IEC 1010-1 safety standards.
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Ordering Information

Technical Service and Repair

Amersham Pharmacia Biotech offers complete technical support for all our products. If you have any questions about how to use this product, or would like to arrange to repair it, please call or fax your local Amersham Pharmacia Biotech representative.

Important repacking instructions

Request a copy of the Amersham Pharmacia Biotech "Contamination Clearance Certificate" before returning the item. No items can be accepted for servicing or return unless this form is properly completed.

	Qty.	Code No.
PS 500XT		
DC Power Supply with 7-hour timer and four dual output jacks, 0-500 V DC, 400 mA. Can be set to constant voltage or constant current with automatic crossover.		
115V, 60 Hz	1	80-6102-99
230V, 50 Hz.	1	80-6103-18
Power cord (115 V)	1	80-6106-03
Power cord (230 V)	1	80-6230-10
Output fuses 250 V, 0.5 A, Fast Blo, 5 x 20 mm (5/pkg)	1 pkg	80-6335-74
Input fuses for 115 VAC model 250 V, 5 A, Slo Blo, 5 x 20 mm (5/pkg)	1 pkg	80-6112-30
Input fuses for 230 VAC model 250 V, 2.5 A, Slo Blo, 5 x 20 mm (5/pkg)	1 pkg	80-6110-21

Amersham Pharmacia Biotech UK Limited Amersham Place Little Chalfont Bucks HP7 9NA
England

Amersham Pharmacia Biotech AB SE-751 84 Uppsala Sweden

Amersham Pharmacia Biotech Inc 800 Centennial Avenue PO Box 1327 Piscataway NJ
08855 USA

Amersham Pharmacia Biotech Europe GmbH Postfach 5480 9 D-79021 Freiburg

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